



Stationary Bio-waste Conversion System

❖ *Make your own golf course and landscape bio-fertilizer*

IF YOU have a Bobcat or front-end loader, you can make your own golf course and landscape bio-fertilizer from local organic waste materials with our new on-site **stationary** containerized bio-waste conversion system.

- ❖ Proven technology since 1994. Air controlled process used by the US Navy since 2000.
- ❖ Meets US EPA 503 Biosolids Rules for Class A unrestricted use.

Includes digesters, biofilters, filter media, blower, pipe, quick-couplers, sensors and initial training.

Internationally patented equipment and process made from modified 20' or 40' Intermodal shipping containers, designed for 15 year exposure to seawater. Double epoxy coated corrosion and abrasion resistant COR-TEN[®] steel for long life. Only 1 hp per ton per day. Single phase electrical or direct power OK.

In most cases, minimal concrete and hard surface required. Leachate fully re-circulated; no sewer or treatment pond necessary.

Call for great prices on front-end loaders and mixer (required) and optional screeners, conveyors, recycling sort lines and shredders.

Renewable Carbon Management LLC ❖ NaturTech, NaturSoil, CompostMan
320-253-5076 ❖ rcm@composter.com ❖ www.composter.com

Roll-off chassis, insulation, lid, additional coat of paint all extra • Models shown have features not included in base price



ALL SYSTEMS – MANUAL, ADVANCED, OR FULLY AUTOMATED INCLUDE

CHOICE OF DIGESTER SIZES

- ❖ 6.1m (20') × 2.6m rigid top Digester – 20 ton rated capacity – 1 TPD
- ❖ 12.2m (40') × 2.6m rigid top Digester – 40 ton rated capacity – 2 TPD
- ❖ Calculations based on standard 20 day retention time.
- ❖ For 7 day retention time option 20' Digester = 3 TPD, 40' Digester = 6 TPD
- ❖ If "dump and remix" option used, increase throughput up to 50% or 1½ and 3 TPD
- ❖ Both 20' and 40' Digesters have 1.2m conveyor access port or 1.9m × 2.6m opening in top
- ❖ 20' or 40' Biofilter is fully open on top

EACH BIO-CONTAINER

- a. 25mm plastic aeration floor with plug resistant hole design
- b. 30mm leachate drain with hose, quick coupler and ball valve
- c. 2 - 100mm threaded air intake ports
- d. Fully locking double doors with two way gaskets
- e. Double epoxy coated COR-TEN® steel
- f. Temperature probe access port
- g. Bucket guide back and side wall protection system

MANUALLY OPERATED SYSTEM

- a. Centrifugal cast aluminum blower with stand
- b. Single or polyphase 50 or 60 hz
- c. Plastic pipe, fittings, supports, quick couplers
- d. Manual damper
- e. Leachate tank and sump pump
- f. Condensate collection system
- g. Operating manual and video/CD
- h. Site preparation drawings and video/CD
- i. Illustrated Parts Breakdown list
- j. Heavy duty stainless steel analog temperature probe
- k. Hand held digital air velocity and air temperature sensor
- l. FOB any US International Seaport
- m. Call for international port rate – Bio-containers can double as shipping containers
- n. 24 hours installation support and training not including travel and expenses
- o. 1 year Internet and phone support up to 20 additional hours



OPTIONS

AUTOMATED PROCESS CONTROL

- ❖ Advanced and Automated process control options reduce labor and decrease the risk of odors.
- ❖ The advanced option has negative air pressure like basic manual system, but has data logging and increased temperature control capability. The fully automated option has air velocity feedback, modulating dampers and positive and negative air control with a second blower and manifold.
- ❖ Both options increase quality control and can be used to optimize the rate of decomposition and reduce compost retention time.

ADVANCED—ADD \$3,000 PER DIGESTER

- a. 1 Actuated valve per digester
- b. 1 Heavy duty stainless steel electronic temperature probe and transmitter per digester
- c. Damper timer controller
- d. Temperature control switch for damper

FULLY AUTOMATED ADD \$20,000 PLUS \$6,000 PER DIGESTER

- a. Second blower, manifold and piping
- b. Variable Frequency Drives and 2 static pressure sensors
- c. 2 Modulating actuated dampers per digester
- d. 1 Differential pressure sensor per digester
- e. 1 Heavy duty stainless steel electronic temperature probe and transmitter per digester
- f. Damper timer and temperature controller
- g. Data logging software
- h. Graphic user interface
- i. Computer and remote access with phone line or Internet

SAMPLING AND TESTING

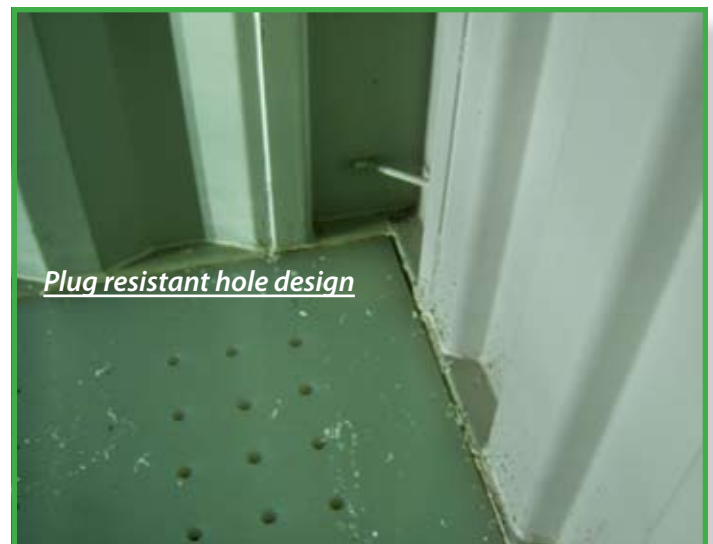
- a. Feedstock sampling tools — \$250
- b. Dryer and scale — \$1,000 or \$5,000 oven with hood
- c. Porosity tester — \$1,000
- d. Compost maturity test kits — \$35 each in lots of 10
- e. O₂ sensor probe — \$3,500

CONTAINER OPTIONS

- a. Roll-off container chassis adapter — \$2,000 (20' only)
- b. Container ramps for loader — \$800
- c. Gravity filter dewatering container — Call for price
- d. Insulation R-12 or R-17 reflective thermal barrier (R-29 optional)
- e. Container abrasion wear liner (required with 20' mobile system)
- f. Additional temperature access ports — \$300 each
- g. Hydraulically actuated lids with hand pump — \$3500 per 20' digester, \$6,500 per 40' digester
- h. Custom exterior painting — \$2,000 – 20', \$3,000 – 40'

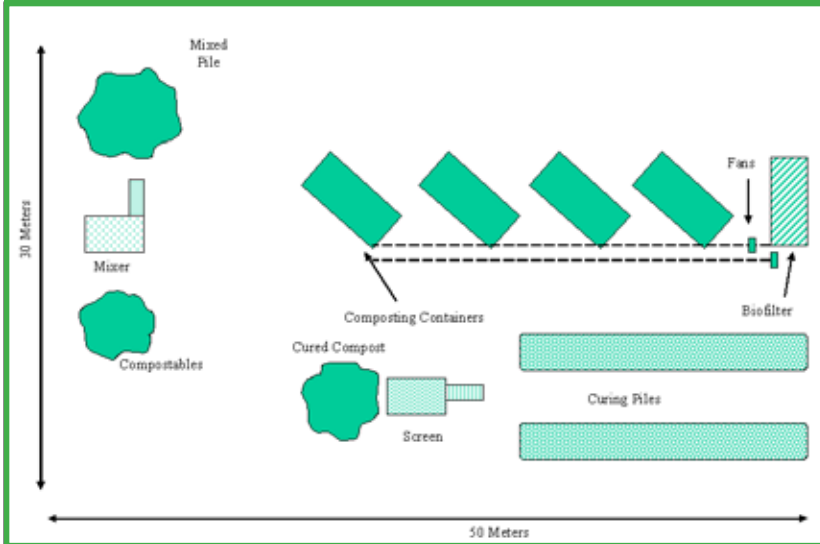
SUPPORT EQUIPMENT

- a. Customized loader and bucket
 - b. Containerized water treatment system
 - c. Screener – trommel, deck or dish
 - d. Mobile conveyors and hoppers
 - e. Mixers – auger, ribbon or vertical
 - f. Mixing/dewatering system – concrete drying bed
 - g. Sorting conveyors and hoppers
 - h. CM-Pro surge bins or transfer containers 4-way pallet, insulated – 1 m³
 - i. Roll-off truck, stationary tipper
 - j. Wood shredders – grinders
 - k. Pallet jacks, forklifts, forklift rotators
 - l. Control room, office, laboratory
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- ❖ Extended warranty, regulatory compliance, training and service contracts available
 - ❖ Prices valid through September 2007
 - ❖ Prices subject to change without notification

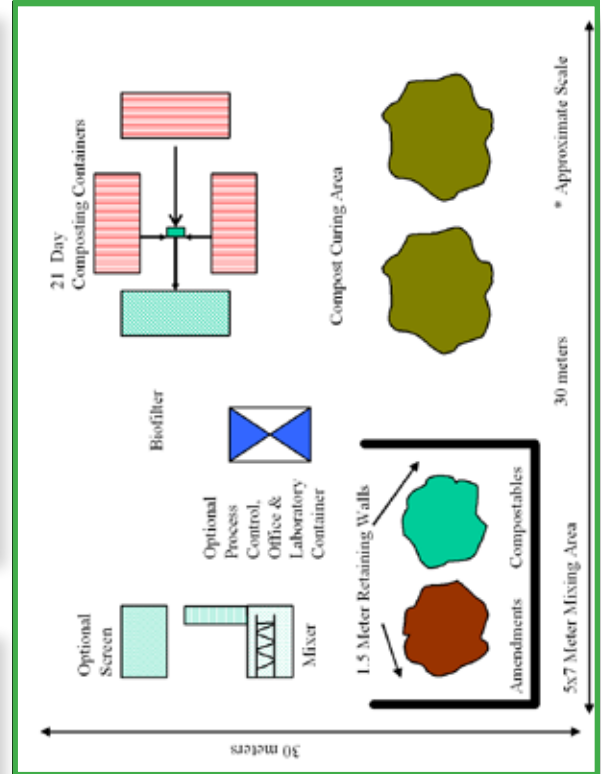


CONCEPTUAL SITE LAYOUTS

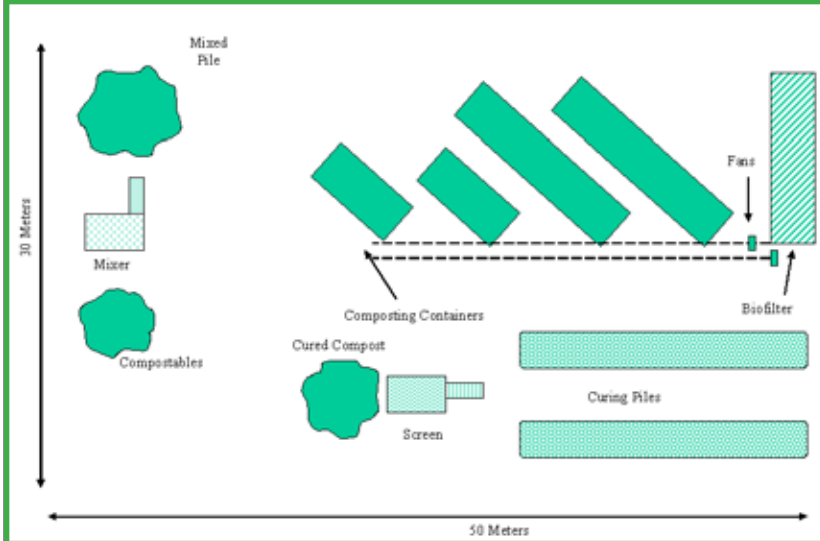
4-5 TONS PER DAY



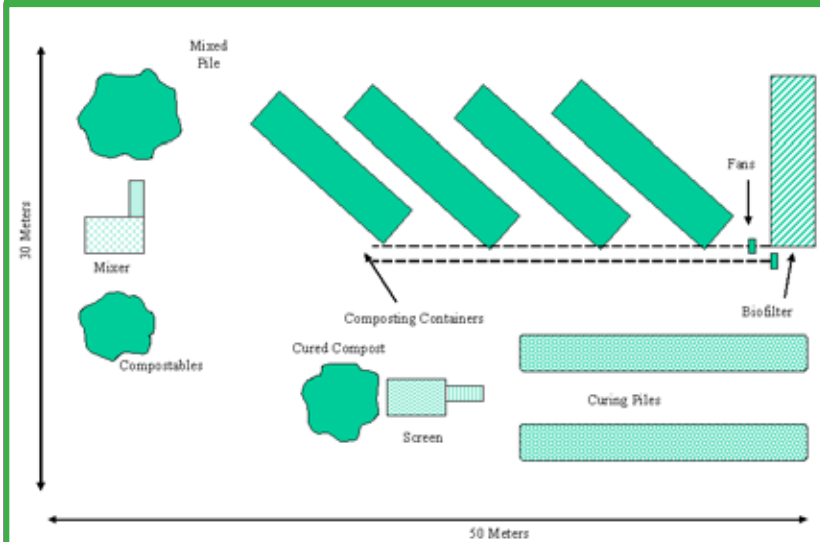
3 TONS PER DAY



6 TONS PER DAY



8 TONS PER DAY



CONFIGURATION OPTIONS

- ❖ 3 TPD—(3) - 20' digesters, one 20' biofilter
\$125,000
- ❖ 4 TPD—(4) - 20' digesters, one 20' biofilter
\$150,000
- ❖ 5 TPD—(5) - 20' digesters, one 20' biofilter
\$175,000
- ❖ 5 TPD—(3) - 20' digesters, (1) - 40' digesters, one 20' biofilter
\$155,000
- ❖ 6 TPD—(2) - 20' digesters, (2) - 40' digesters, one 40' biofilter
\$165,000
- ❖ 7 TPD—(3) - 20' digesters, (2) - 40' digesters, one 40' biofilter
\$190,000
- ❖ 8 TPD—(4) - 40' digesters, (1) 40' biofilter
\$175,000
- ❖ 10 TPD—(5) - 40' digesters, (1) 40' biofilter
\$210,000
- ❖ 20 TPD—(10) - 40' digesters, (2) 40' biofilters
\$355,000

